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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/997,426

11/29/2001

Tyler Thorp

03226/136001; P6821

6431

32615

7590

09/23/2004

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EXAMINER

THOMPSON, ANNETTE M

ART UNIT

PAPER NUMBER

2825

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,426

Applicant(s) *JK*

THORP ET AL.

Examiner

A. M. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-9 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 2,6 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Applicants' amendment to 09/997,426 has been examined. Claim 15 is added. Claims 1-10, and 13-15 are pending.

1. Applicants' amendments and remarks have been carefully considered and are deemed persuasive. However, a new ground of rejection has been applied herein.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Rejection of claims 1, 3-5, 7-9, and 13-15

3. Claims 1, 3-5, 7-9, and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Haritsa et al. (Haritsa), US Publication 2003/0074642. Haritsa discloses a method and apparatus for determining clock insertion delays for a microprocessor design having a grid-based clock distribution.

4. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

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the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

5. Pursuant to claims 1 and 5 which recite [a]n integrated circuit (Haritsa discloses a microprocessor design, Abstract and [0001, 0002, 0028]) comprising a clock driver disposed on the integrated circuit [Haritsa, 0009]; a clock grid disposed on the integrated circuit (Haritsa, Fig. 3, L2 grid), wherein the clock driver is disposed outside a region of the clock grid (Haritsa, Fig. 4, illustrates the clock drivers outside of the clock grid); and at least one interconnect arranged to propagate a signal from an output of the clock driver past an exterior region of the clock grid to a connection point residing at a non-exterior region of the clock grid (Haritsa discloses clocked elements within the L2 grid, 0010).

6. Pursuant to claim 3, 7 and 15 wherein the at least one interconnect is arranged in a wire tree configuration (Haritsa, Fig. 4, illustrates a wire tree configuration).

7. Pursuant to claim 4 and 8, wherein the wire tree configuration is balanced (Haritsa, Fig. 4, L5-L3 illustrates a balanced wire tree configuration).

8. Pursuant to claim 9 which recites [a] method for reducing clock skew comprising sending a clock signal from a clock driver to a first component through a connection point on a clock grid (Haritsa, Fig. 4), wherein the clock driver resides outside a region of the clock grid (fig. 3); and sending the clock signal from the clock driver to a second component through the connection point (Fig. 3), wherein the clock signal is propagated from an output of the clock driver past an exterior region of the clock grid to the

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connection point (Fig. 3), and wherein the connection point is at a non-exterior region of the clock grid.

9. Pursuant to claim 13, which recites a transmission structure for driving a signal onto a clock grid, comprising an interconnect connecting a clock driver to the clock grid (Figs. 3, 4), wherein the clock driver resides outside of a region of the clock grid (Haritsa discloses clocked elements within the L2 grid, 0010), wherein the interconnect connects the clock driver past an exterior region of the clock grid to a connection point residing at a non-exterior region of the clock grid (Fig. 3).

10. Pursuant to claim 14, wherein the transmission structure is balanced (Haritsa, Fig. 4, L5-L3 illustrates a balanced wire tree configuration).

Allowable Subject Matter

11. Claims 2, 6, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: In a method for reducing clock skew, the prior art does not teach positioning the interconnect that connects the clock drivers to the clock grid so that a clock signal driven within an interior region inside the periphery of a clock grid structure has less skew than a clock signal traveling along the periphery of the clock grid within the clock grid structure.

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Conclusion

13. Any inquiry concerning this communication or earlier communications should be directed to Examiner A.M. Thompson whose telephone number is (571) 272-1909. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 4:30 p.m..

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

14. Responses to this action should be mailed to the appropriate mail stop:

Mail Stop _____

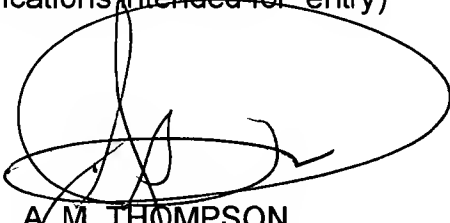
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or faxed to:

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)



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